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Production of Thermal Axions in the Early Universe

Tuesday, 21 September 2021 10:20 (15 minutes)

We study the thermal production of axions over different scales especially around the QCD and electroweak phase transitions in the early universe. We focus on the most motivated axion models (KSVZ and DFSZ) and investigate how the thermal history can influence on the production rate of hot axion as dark radiation. This can lead to predictions for the future measurements of the cosmic microwave background by experiments like CMB-S4.

Do you wish to attend the workshop on-site?

yes

Summary

Based on arXiv:2108.04259 and arXiv:2108.05371

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